ENVIRONMENTAL ASSESSMENT CHECKLIST

EA Number: **NM-510-2005-0055** Preparer: Joseph M. Navarro			**Action Type: Grazing Permit Renewal** Project Name: Guy Cecil Conklin #64075		
Resource / Activity	**Not Present**	**Not Affected**	****May Be Affected**	**Reviewer**	**Date**
Air Quality*			X	/s/ Michael McGee Hydrologist	11/04/05
Floodplains*			X		
Soils/Watershed			X		
Water Quality- Drinking/Ground*			X	/s/ Michael McGee Hydrologist/Geologist***	11/04/05
Vegetation			X	/s/ hcjmiller Rangeland Management Spec	10/24/2005
Livestock Grazing			X		
Invasive, Nonnative Species*			X	/s/ hcjmiller Range Mgmt Spec/Nox. Weed Spec	10/24/2005
Wastes, Hazardous or Solids*				Hazardous Waste Spec.	
Prime/Unique Farmlands*	X			Irene M. Gonzales Realty Specialist	10-11-2005
Lands/Realty/ROW		X			
Fluid Minerals		X		/s/ Armando A. Lopez Pet Eng/Geologist/Sur. Prot. Spec.	10/25/05
Mining Claims		√		/s/ Jerry Dutchover Geologist	/s/ 10/11/05
Mineral Materials		√			
Threatened or Endangered Species*			X	/s/ Ernest Jaquez Wildlife Biologist	10/13/2005
Wetlands/Riparian Zones*	X				
Wildlife Habitat			X		
Native American Religious Concerns*		X		Pat Flanary Archaeologist	10/19/05
Cultural Resources*		X			
Areas of Critical Environmental Concern*	X			J H Parman Planning & Env. Coordinator	10-11-05
Low Income & Minority Population Concerns		X			
Wild/Scenic Rivers*	x			*Paul T. Happel* Outdoor Recreation Planner/NRS	10/20/05
Wilderness*	x				
Cave/Karst Resources		x			
Outdoor Recreation		x			
Visual Resources		x			
Access/Transportation				Sur. Prot. Spec.	

* "Critical Element" - must be addressed in all NEPA documents.

** "Affected Element" - must be addressed in the attached Environmental Assessment.

*** "Hydrologist/Geologist" – Hydrologist will be the primary lead for "Water Quality- Drinking/Ground" with Resource projects such as fire, fuels, and grazing EA's etc… The Petroleum Geologist will be the primary lead for "Water Quality- Drinking/Ground" with Minerals or oil and gas projects such as Application For Permit To Drill and Sundry Notices etc...

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action and alternatives will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action and alternatives would not result in any undue or unnecessary environmental degradation. The proposed action and alternatives will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

/s/ T. R. Kreager 3/14/06

T. R. Kreager, Date
Assistant Field Manager, Resources

ENVIRONMENTAL ASSESSMENT

For

Section 3

GRAZING AUTHORIZATION

Township 15 S., Range 23 E.

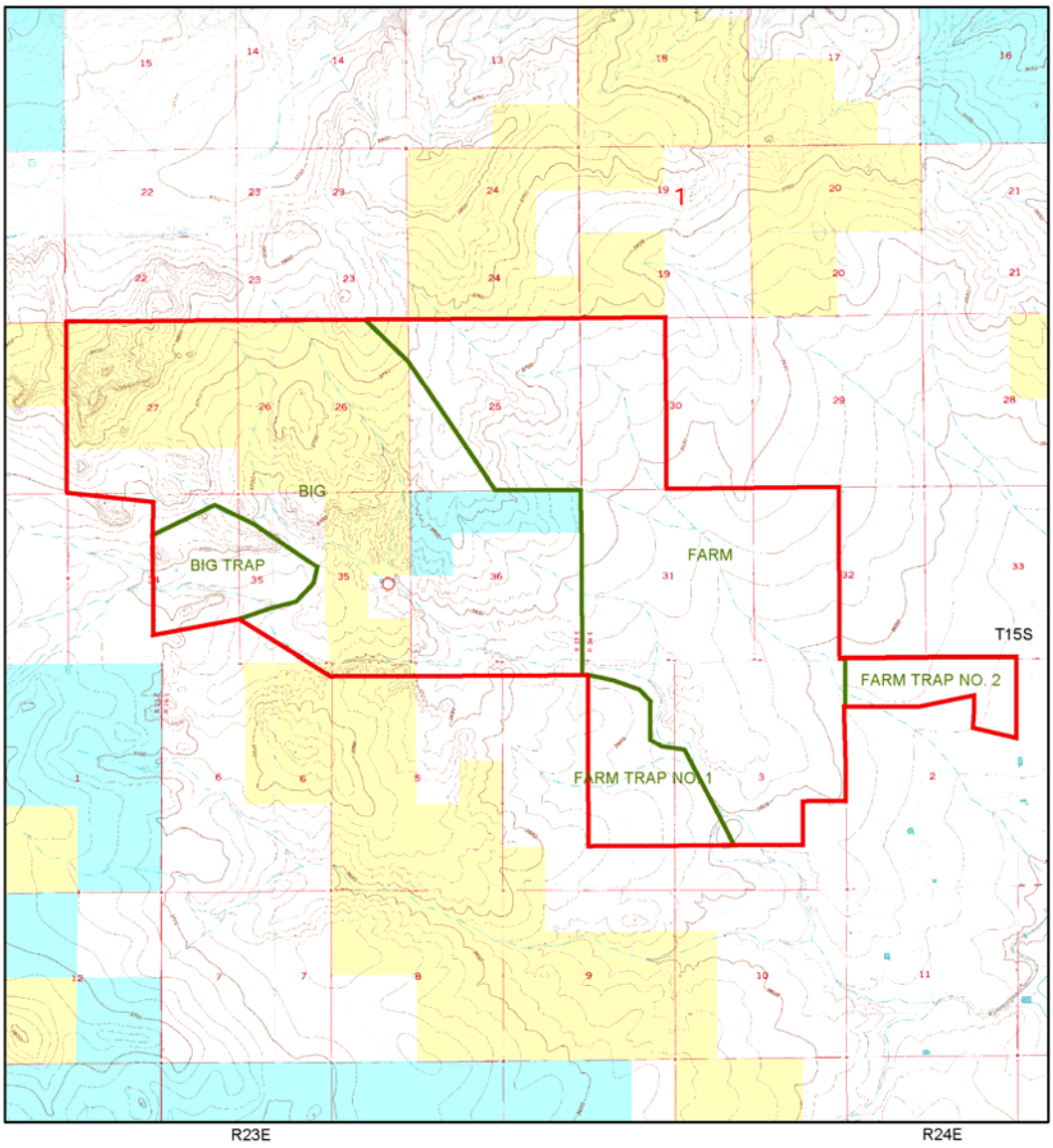
ALLOTMENT #64075

EA-NM-510-2005-0055

May 2005

U.S. Department of the Interior
Bureau of Land Management
Pecos District
Roswell Field Office
Roswell, New Mexico

Guy Cecil Conklin - 64075



State Land

Public Land

Private Land

Allotment Boundary

Pasture Fence

Base Waters in Red

Water Well

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other date. Original data was compiled from various sources. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.

Produced by the RFO GIS Specialist on March 13, 2006.

I. Introduction

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit/lease on allotment #64075.

The scope of this document is limited to the effects of issuing a 10-year grazing permit. Other future actions such as range improvement projects will be addressed in a project specific environmental assessment. There are no current plans for additional management actions on this allotment.

A. Purpose and Need for the Proposed Action

The purpose of issuing a new grazing permit would be to reauthorize livestock grazing on public land on allotment #64075 and modify the permit term to coincide with the Bureau of Land Management (BLM) schedule for Public Land (Rangeland Health Assessments) with permit/lease renewals. The permit would specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR ▻▻4130.3, 4130.3-1, 4130.3-2 and 4180.1. The existing permit expires 02/28/05.

B. Conformance with Land Use Planning

The Roswell Resource Management Plan/Environmental Impact Statement (October 1997) has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision. The proposed action is consistent with the RMP/EIS.

C. Relationships to Statutes, Regulations, or Other Plans

The proposed action is consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Federal Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management and Executive Order 11990, Protection of Wetlands.

Proposed Action and Alternatives

A. Proposed Action:

The proposed action is to authorize Guy Cecil Conklin, a grazing permit for BLM allotment Guy Cecil Conklin. The permit would authorize 100 Animal Units (AU's) yearlong at 28 percent federal range for 336 Animal Unit Months (AUM's) for allotment #64075. Cattle are the class of livestock proposed for authorization.

B. No Permit Authorization Alternative:

This alternative would not issue a new grazing permit. There would be no livestock grazing authorized on public land within allotment #64075.

C. Change Permitted Active Use Livestock Numbers or Management Alternative:

Under this alternative the permitted active use livestock numbers for allotment #64075 would be reduced. The livestock numbers associated with this reduction would either be placed into suspended use or into temporary nonuse (if a rangeland agreement with the permittee is successfully negotiated). This alternative will not be analyzed, based on the following rationale.

The long term monitoring data through 2005 was evaluated prior to this environmental assessment using the established RFO protocols. These protocols utilize forage yield and range condition ratings and the similarity index ratings to verify sustainable use. A forage quality factor (to limit allocation of moderate to low value forage plants) was also used. The overall evaluation supports the current active permitted use (100 AUs).

This review also considered the drought conditions that begin surfacing about 1999-2003 and the permittee's responses to these conditions. Licensed use (billed use) was reduced from the upper level of the active permitted use, 100 AU's (336 AUMs) to 90 AU's (302 AUM's) in 2004 to balance livestock grazing with resource conditions. Management actions were being taken to balance the use with resources.

All available data sets (production, ground cover, plant frequency) as well as associated indices derived from these data were used in the evaluation. The resource conditions are stable and will support the permitted use level.

A. General Setting

Allotment #64075 is located in Chaves County, approximately 30 miles south of Roswell, New Mexico. The allotment consists of 1,617 and 2,808 acres of public and private land respectively. The allotment also has 640 acres State land. The qualifying base water is located on public land.

This allotment lies within the boundaries of the Roswell Grazing District established subsequent to the Taylor Grazing Act (TGA). Grazing authorization on public land inside the Grazing

District boundary is governed by Section 3 of the TGA. Livestock numbers for the ranch are controlled under this Section 3 permit, the permittee is billed for the amount of forage available for livestock on federal land. Vegetation monitoring studies are used to determine the allowable number of livestock on the ranch.

The following resources or values are not present or would not be affected: Prime/Unique Farmland, Areas of Critical Environmental Concern, Minority/Low Income Populations, Wild and Scenic Rivers, Hazardous/Solid Wastes, Wetlands/Riparian Zones, Floodplains, and Native American Religious Concerns. Cultural inventory surveys would continue to be required for public actions involving surface disturbing activities.

B. Affected Resources

1. **Soil:** In general, the soil in the area is very shallow and well drained to moderately deep. The surface layers are loam and fine sandy loam. overlying dense layers of soft or cemented layers of gypsum material. This area is covered in The Soil Survey of Chaves County New Mexico, Southern Part, published by the Natural Resource Conservation Service (NRCS). A copy of this publication may be reviewed at the BLM Roswell Field Office or at the local NRCS office: Major soil associations on this allotment are:

Tencee-Upton complex:

Tencee soil makes up 55 percent of the map unit. This map unit is in the Southern Desertic Basins, Plains, and Mountains Major Land Resource Area. The runoff class is medium. The depth to a restrictive feature is 7 to 20 inches to a petrocalcic and is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity within a depth of 60 inches is very low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 45 percent. In the soil profile, there are no saline horizons, and there are no sodic horizons. This component is in the Gravelly ecological site.

Upton soil makes up 35 percent of the map unit. This map unit is in the Southern Desertic Basins, Plains, and Mountains Major Land Resource Area. The runoff class is medium. The depth to a restrictive feature is 7 to 24 inches to a petrocalcic and is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity within a depth of 60 inches is very low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 75 percent. In the soil profile, the maximum salinity is very slight, and there are no sodic horizons. This component is in the Shallow ecological site.

Reakor-Tencee complex:

The Reakor soil consists of deep, well drained alluvium on uplands and valley fans. Effective rooting depth is 65 inches or more with a moderately calcareous profile and moderately calcareous in the surface layer and strongly calcareous below. This soil is moderately alkaline throughout with moderate permeability. Available water capacity is 9 to 12 inches. Effective rooting depth is 65 inches or more. This component is a Loamy ecological site.

Tencee soil makes up 55 percent of the map unit. This map unit is in the Southern Desertic Basins, Plains, and Mountains Major Land Resource Area. The runoff class is medium. The depth to a restrictive feature is 7 to 20 inches to a petrocalcic and is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity within a depth of 60 inches is very low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 45 percent. In the soil profile, there are no saline horizons, and there are no sodic horizons. This component is in the Gravelly ecological site.

Sotim Series: The Sotim series consists of deep, well drained soil formed in alluvium on uplands with 0 to 5 percent slopes. The surface layer is reddish brown fine sandy loam about 7 inches thick. The subsoil is reddish brown and yellow light clay loam about 10 inches thick. The soil profile is moderately calcareous in the surface layer and subsoil upper part of the subsoil and strongly calcareous below. It is moderately alkaline throughout. Permeability is moderately slow and available water capacity is 9 to 11 inches. Effective rooting depth is 60 inches or more. Runoff is medium and water and soil blowing hazard is moderate. This component is in the Loamy ecological site.

Torriorhents, very steep: This soil occurs in the east-central part of the survey area and along the High Plains escarpments. Slopes are 30 to 80 percent or more. The soil is mainly steep and very steep, calcareous, gravelly and cobbly. The texture is medium to coarse and commonly stratified. Runoff is very rapid and water erosion is severe. The hazard of soil blowing is moderate. Gullies are common. This component is in the Breaks ecological site.

2. **Vegetation:** This allotment is within the mixed desert shrub vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community. The mixed desert shrub community is primarily made up of desert grasses, shrubs and cacti. The predominant shrub species include creosote *(Larrea tridentata)*, mesquite *(Prosopis glandulosa*), tarbush *(Flourensia cernua)*, four-wing saltbush *(Atriplex canescens),* little leaf sumac *(Rhus microphylla),* javelinabush *(Condalia spp.)*, dogweed (Dyssodia spp.), feather dalea *(Dalea formosa)* and sage *(Artemesia* spp.). Common cacti encountered are claret cup *(Echinocereus triglochidiatus)*, cholla *(Opuntia imbricata)*, prickly pear *(Opuntia engelmannia*), and eagle claw *(Echinocactus horizonthalonius).* Forbs include plantain *(Plantago* spp.), globemallow *(Sphaeralcea* spp.), and buckwheat *(Eriogonum* spp.). Grasses include fluffgrass *(Dasyochloa pulchella)*, sideoats grama *(Bouteloua curtipendula)*, black grama *(Bouteloua eriopoda)*, blue grama *(Bouteloua gracilis),*

dropseed *(Sporobolus* spp.), bush muhly *(Muhlenbergia porteri)*, tobosa *(Pleuraphis mutica),* burrograss *(Scleropogon brevifolius),* vine mesquite *(Panicum obtusum),* threeawn *(Aristida spp.),* wolftail *(Lycurus phleoides,* alkali sacaton *(Sporobolus airoides)* and gyp grama *(Bouteloua breviseta).* The percentages and species of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather factors, past resource uses and the potential of the site.

The primary ecological (range) sites on the allotment are Loamy, Sandy and Gravelly SD-3. Ecological site descriptions are available for review at the Roswell BLM office or any Natural Resources Conservation Service office or may be accessed at www.nm.nrcs.usda.gov. Other ecological sites include Shallow and Breaks.

Two permanent monitoring sites were established in 1983 and one in 2004; the last monitoring data was collected in 2005. The current vegetative data for Big Pasture indicates an increasing composition of shrubs to grasses and forbs. Creosote is currently at 40 percent of the total composition with perennial forbs like bladderpod *(Lesquerella* spp.) and grass black grama *(Bouteloua eriopoda)* at 10 and 7 percent respectively. Other shrubs such as range ratany *(Krameria* spp.) and Christmas cactus *(Opuntia leptocaulis)* comprise the remainder of vegetative composition for the shrub component. Threeawn and fluffgrass account for the remainder of grass composition. For Farm Pasture, recent monitoring data indicates the combination of tobosa and burrograss accounts for approximately 60 percent of the composition. Buffalograss *(Buchloe dactyloides)* also is present as a minor component of the grass production. The most recent monitoring site established is located on the eastern edge of Big Pasture. The single data collection in 2005 indicates a composition of approximately 65 percent of the total for grasses tobosa and burrograss. Muhly's *(Muhlenbergia* spp.) and perennial forbs account for the remainder of grass composition on this Sandy ecological site.

3. **Wildlife:** The allotment provides habitat for small animals, birds, rodents, and a sustainable population of mule deer *(Odocoileus hemionus)* and pronghorn *(Antilocapra americana).* The area does contain brush or tree species that could provide quality cover for the larger animals. Other game species occurring within the area include mourning dove *(Zenaida macroura),* and scaled quail *(Callipepla squamata)*. Raptors that utilize the area on a more seasonal basis include the Swainson's hawk *(Búteo swáinsoni*), red-tailed hawk *(Buteo jamacensis),* ferruginous hawk *(Buteo regalis)*, American kestrel *(Fálco sparvérius)*, and great-horned owl *(Bubo virginianus).* Numerous passerine birds utilize the grassland areas due to the variety of grasses, forbs, and shrubs. The most common include the western meadowlark *(Sturnella neglecta),* mockingbird *(Mimus polyglottos)*, horned lark *(Eremophila alpestris),* killdeer *(Charadrius vociferus),* loggerhead shrike *(Lanius ludovicianus),* and vesper sparrow *(Pooecetes gramineus).*

The warm prairie environment supports a large number of reptile species. The more common reptiles include the short-horned lizard *(Phrynosoma douglasii)*, lesser earless lizard *(Holbrookia maculata),* eastern fence lizard *(Sceloporus undulatus),* coachwhip *(Masticophis flagellum),* bullsnake *(Pituophis melanoleucus sayi)*, prairie rattlesnake *(Crotalus v. viridis),* and western rattlesnake *(Crotalus viridis).*

A general description of wildlife occupying or potentially utilizing the proposed action area is located in the Affected Environment Section (p. 3-62 to 3-71) of the Draft Roswell RMP/EIS (9/1994).

4. **Threatened and Endangered Species:** There are no known resident populations of threatened or endangered species on this allotment. A list of federal threatened, endangered, and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell RMP (AP11-2). Of the listed species, avian species such as the bald eagle *(Haliaeetus leucocephalus)* and peregrine falcon *(Falco peregrinus)* may be observed in the general geographic area during migration or the winter months. There are no known records of these species having occurred on the allotment, and no designated critical habitat areas are within the allotment.

5. **Livestock Management:** This allotment is a "M" (Maintain) category due to the small amount of public land present. The allotment consists of three pastures for cattle. Livestock waters are located on private, state and public land.

6. **Visual Resources**: The allotment is located in a Class IV Visual Management Area. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. **Water Quality Drinking/Ground:** No perennial surface water is found on public land on this allotment. Fresh water sources are in the Quaternary Alluvium and the San Andres Formation. Depth to fresh water has been found at approximately 180 feet in Quaternary Alluvium. Depth to fresh water has been found from approximately 250 feet to 500 feet in the San Andres Formation (New Mexico State Engineer Office data).

8. **Air Quality:** Air quality in the region is generally good. The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the public Clean Air Act. Class II areas allow a moderate amount of air quality degradation.

9. **Recreation:** Recreation opportunities are very limited in this grazing allotment because the public has limited legal/physical access to public lands. The parcels of Public lands within this allotment are scattered and are generally surrounded by private lands.

Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

10. **Cave/Karst:** This allotment is not located within a designated area of low karst and cave potential. A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. Presently, no known significant caves or karst features have been identified within this allotment. If at a later date, a significant cave or karst feature is located on public lands within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this exclosure fence.

11. **Noxious Weeds** - Noxious and Invasive species: A noxious weed is defined as a plant that causes disease or has other adverse effects on the human environment and is, therefore, detrimental to the public health and to the agriculture and commerce of the United States. Generally, noxious weeds are aggressive, difficult to manage, parasitic, are carriers or hosts of harmful insects or disease, and are either native, new to, or not common in the United States. In most cases, however, noxious weeds are non-native species.

The list currently includes the following weeds: 1) African rue *(Peganum harmala)*, 2) black henbane *(Hyoscyamus niger)*, 3) bull thistle *(Cirsium vulgare),* 4) camelthorn *(Alhagi pseudalhagi),* 5) Canada thistle *(Cirsium arvense),* 6) dalmatian toadflax *(Linaria genistifolia ssp. Dalmatica)*, 7) goldenrod, *(Solidago Canadensis)* 8) leafy spurge *(Euphorbia esula),* 9) Malta starthistle *(Centaurea melitensis),* 10) musk thistle *(Carduus nutans),* 11) poison hemlock *(Conium maculatum),* 12) purple starthistle *(Centaurea calcitrapa),* 13) Russian knapweed *(Centaurea repens),* 14) Scotch thistle *(Onopordum acanthium),* 15) spotted knapweed *(Centaurea maculosa),* 16) teasel *(Dipsacus fullonum)*, 17) yellow starthistle *(Centaurea solstitialis),* 18) yellow toadflax *(Linaria vulgaris),* 19) Russian olive *(Elaeagnus angustifolia),* 20) Saltcedar *(Tamarix chinensis),* 21) Siberian elm *(Ulmus pumila).*

Of the noxious weeds listed, the ones with known populations in the Roswell District are African rue, non-native thistles *(Cirsium* spp.) such as bull thistle and Canada thistle, musk thistle, leafy spurge, poison hemlock, teasel, Russian olive, salt cedar, Siberian elm, goldenrod, Malta starthistle, Russian knapweed, and Scotch thistle. Also "problem weeds" of local concern are cocklebur *(Xanthium* spp.*)*, buffalobur *(Curcurbita foetidissima)* and spiny cocklebur *(Xanthium spinosum)*. "Problem weeds" are those weeds which may be native to the area but whose populations are out of balance with other local flora.

12. Floodplains:

Within this allotment floodplains exist that are recorded on Federal Emergency Management Agency maps. Water pipelines, fences and roads cross the floodplains; no adverse impacts have resulted from these improvements. No future permanent, above ground structures will be authorized on federal lands within the floodplains.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. **Soil:** Grazing activities will continue to have some impact to the soil. These impacts may include: removal of standing vegetation and litter; soil compaction along livestock trails or soil compaction may occur if livestock are concentrated during prolonged periods when the soil is wet. These effects can lead to reduced infiltration rates and increased runoff. Reduced vegetative cover and increased runoff can result in higher erosion rates and soil losses, making it more difficult to produce forage and to protect the soil from further erosion. These adverse effects can be greatly reduced by maintaining adequate vegetative cover on the soil.

Proper utilization levels and grazing distribution patterns are expected to retain sufficient vegetative cover on the allotment as a whole and this would maintain the stability of the soil. Soil compaction and excessive vegetative use would occur at small, localized areas such as drinking locations, along trails and at bedding areas. Positive affects from the proposed action include the speeding up of the nutrient cycling process and chipping of the soil crust by hoof action may stimulate seedling growth and water infiltration.

2. **Vegetation:** Vegetation would continue to be grazed and trampled by domestic livestock as well as other herbivores. Ecological condition and trend is expected to remain stable and/or improve over the long term with the proposed authorized number of livestock and existing pasture management. Rangeland monitoring data indicates that there is an adequate amount of forage for the multiple resource use objectives.

3. **Wildlife:** Domestic livestock would continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is minimal in this area. Numerous residential developments and private land uses have impacted habitat over the years of development of the area. Cover habitat for wildlife would remain the same as the existing situation. Maintenance and operation of existing base water would continue to provide dependable water sources for wildlife, as well as livestock.

4. **T&E species**: Livestock grazing resulting from issuing a grazing lease, may affect, but not likely to adversely affect the bald eagle. It is expected that habitat and range condition would be maintained or improved by authorizing grazing conducive with multiple resource vegetative production goals. Habitat for wintering bald eagles would not be negatively impacted by livestock grazing. There would be no impact to the peregrine falcon since important riparian nesting sites are not found on this allotment.

5 **Livestock Management:** No adverse impacts are anticipated under the proposed action. If future monitoring indicates a need for an adjustment in livestock numbers, this determination will be made in accordance with established protocols.

6. **Visual Resources**: The continued grazing of livestock would not affect the form or color of the landscape. The primary appearance of the vegetation within the allotment would remain the same.

7. **Water Quality Drinking/Ground:** Direct impacts to surface water quality would be minor, short-term impacts during stormflow. Indirect impacts to water-quality related resources, such as fisheries, would not occur. The proposed action would not have a significant effect on ground water. Livestock would be dispersed over the allotment, and the soil would filter potential contaminants.

8. Air Quality: Dust levels under the proposed action would be slightly higher than under the no grazing alternative due to allotment management activities. The levels would be within the limits allowed in a Class II area for the Prevention of Significant Deterioration of air quality.

9. Recreation: Grazing should have little or no impact on the dispersed recreational opportunities within this allotment. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views, or to hike without seeing signs of livestock. However, grazing can benefit some forms or recreation, such as hunting, by creating new water sources for game animals.

10. Caves/Karst: No known significant caves or karst features are known to exist on the public ands located within this allotment. Grazing would not affect the karst resources.

This allotment is located within a designated area of Low Karst or Cave Potential.

11. **Non-native and Invasive species**: There are no known noxious weed populations found within this allotment.

12. **Floodplains:** No impacts to the floodplains are known. By keeping structures out of floodplains, impacts should not occur.

B. Impacts of the No Livestock Grazing Alternative.

1. **Soil:** Soil compaction would be reduced on the allotment around old trails and bedding grounds. There would be a small reduction in soil loss on the allotment.

2. **Vegetation:** It is expected that the number of plant species found within the allotment will remain the same, however, there would be small changes in the relative percentages of these species. Vegetation will continue to be utilized by wildlife. There would be an increase in the amount of standing vegetation.

3. **Wildlife:** Conflicts between wildlife and livestock for habitat and dietary needs would not exist under this alternative.

4. **T&E Species**: There would be no impacts to threatened or endangered species or habitat.

5. **Livestock Management:** The forage from public land would be unavailable for use by the permittee. This would have a significant adverse economic impact to the livestock operation. If the No Grazing alternative is selected, the owner of the livestock would be responsible for ensuring that livestock do not enter Public Land [43 CFR 4140.1(b)(1)]. The intermingled land status on the allotment makes it economically unfeasible to fence out the public land and use only the private land. The remaining private land could not support the number of livestock currently authorized and the lower number of livestock would not provide the level of potential income the operator is accustomed to.

6. **Visual Resources**: There would be no change in the visual resources.

7. **Water Quality:** There could be a slight improvement in water quality due to the minor reductions in sediment loading during stormflow.

8. **Air Quality:** There would be a slightly less dust under this under this alternative versus the proposed alternative, but this would be negligible when considering all sources of dust.

9. **Recreation:** Impacts would be very minor under the alternative. No positive impacts from livestock watering locations would occur.

10. **Caves/Karst:** A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. Presently, no known significant caves or karst features have been identified within this allotment. If at a later date, a significant cave or karst feature is located on public lands within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this exclosure fence.

11. **Non-native and Invasive Species**: There would be no change in the existing non-native/invasive species populations.

12. **Floodplains:** Impacts would be the same as the proposed action.

V. Public Land Health

Public Land (Rangeland) Health assessments were completed on the allotment during 2004. Based on the assessments and monitoring data a Determination was made that public land within this livestock grazing allotment is in conformance with the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management. A copy of this assessment can be accessed at www.nm.blm.gov/rfo/index.htm.

VI. Cumulative Impacts

All of the allotments that have permits/leases with the BLM will undergo scoping and analysis in conformance with NEPA. Allotment #64075 is surrounded by others that will undergo this

process. If the proposed action is selected, there would be no change in the cumulative impacts since it does not vary from the current situation.

If the no livestock grazing alternative is selected, there would be little change in the cumulative impact as long as the surrounding allotments continue to be stocked at their current level. If the permitted numbers are reduced on the surrounding ranches as well, the economics of the surrounding communities and/or minority/low income populations would be negatively impacted.

The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was also considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

VII. Residual Impacts

Vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action.

VIII. Socio-Economic Impacts

A description of the economic, social and cultural conditions by geographic region within New Mexico can be found in 2000 New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management Final EIS. The impacts of authorizing grazing for this allotment under the Proposed Alternative on the economic, social and cultural conditions of southeast New Mexico would be positive. On a smaller scale, the impacts of authorizing grazing for this allotment under the Proposed Action on the economic, social and cultural conditions of Chaves County would also be positive.

IX. Mitigating Measures

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

IX. BLM Team Members

Joseph Navarro, John Spain, Tim Kreager, Irene Gonzales-Salas, Jerry Dutchover, Pat Flanary, Michael McGee, Paul Happel, Bill Murry, Howard Parman, and Ernest Jaquez.

Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 626 Date Printed: 5/2/2005

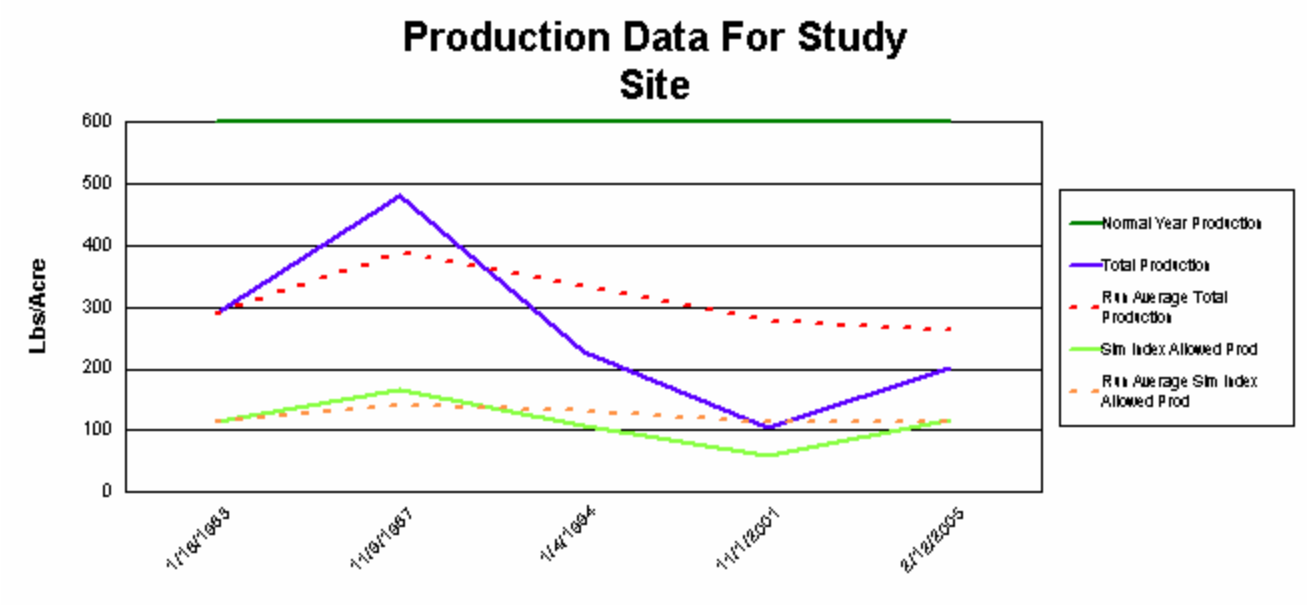
Allot No.	Allotment	Ecosite ID	Ecosite Name	Site Name
64075	GUY CECIL CONKLIN	042CY001NM	GRAVELLY SD-3	64075-BIG PASTURE-E105

Location: **T.** 0150S **R.** 0230E **Sec.** 27 **QtrQt** NWSW **UTM-N** 3649554.251

CHAVES County, NM **UTM-E** 533147.466

Soil Sur No	Soil Map Unit	Soil Tax Name	Soil Association
NM666	TOF	TORRIORTHENTS	TORRIORTHENTS

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
01/18/1983	24.54	19.00	600	290.00	290.00	114.00	114.00
11/09/1987	31.00	27.83	600	482.00	386.00	167.00	140.50
01/04/1994	18.00	18.00	600	227.00	333.00	108.00	129.67
11/01/2001	29.46	20.00	600	105.00	276.00	60.00	112.25
02/12/2005	36.09	19.81	600	201.32	261.06	118.85	113.57



Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 627 Date Printed: 5/2/2005

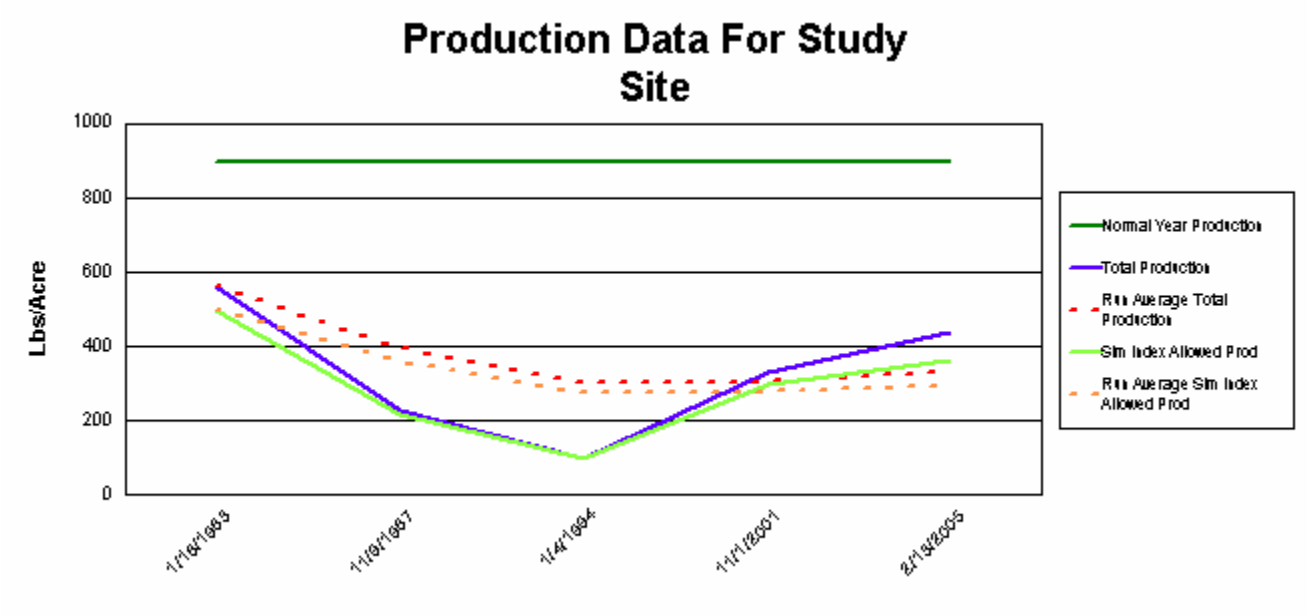
Allot No.	Allotment	Ecosite ID	Ecosite Name	Site Name
64075	GUY CECIL CONKLIN	042CY007NM	LOAMY SD-3	64075-FARM-E106

Location: **T.** 0160S **R.** 0240E **Sec.** 03 **QtrQt** NWSE **UTM-N** 3646067.445

EDDY County, NM **UTM-E** 540206.357

Soil Sur No	Soil Map Unit	Soil Tax Name	Soil Association
NM614	PM	PIMA	PIMA

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
01/18/1983	69.06	55.44	900	565.00	565.00	499.00	499.00
11/09/1987	65.00	24.44	900	226.00	395.50	220.00	359.50
01/04/1994	61.00	11.11	900	100.00	297.00	100.00	273.00
11/01/2001	51.32	33.00	900	331.00	305.50	297.00	279.00
02/13/2005	54.37	40.16	900	440.65	332.53	361.44	295.49



Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 6203 Date Printed: 5/2/2005

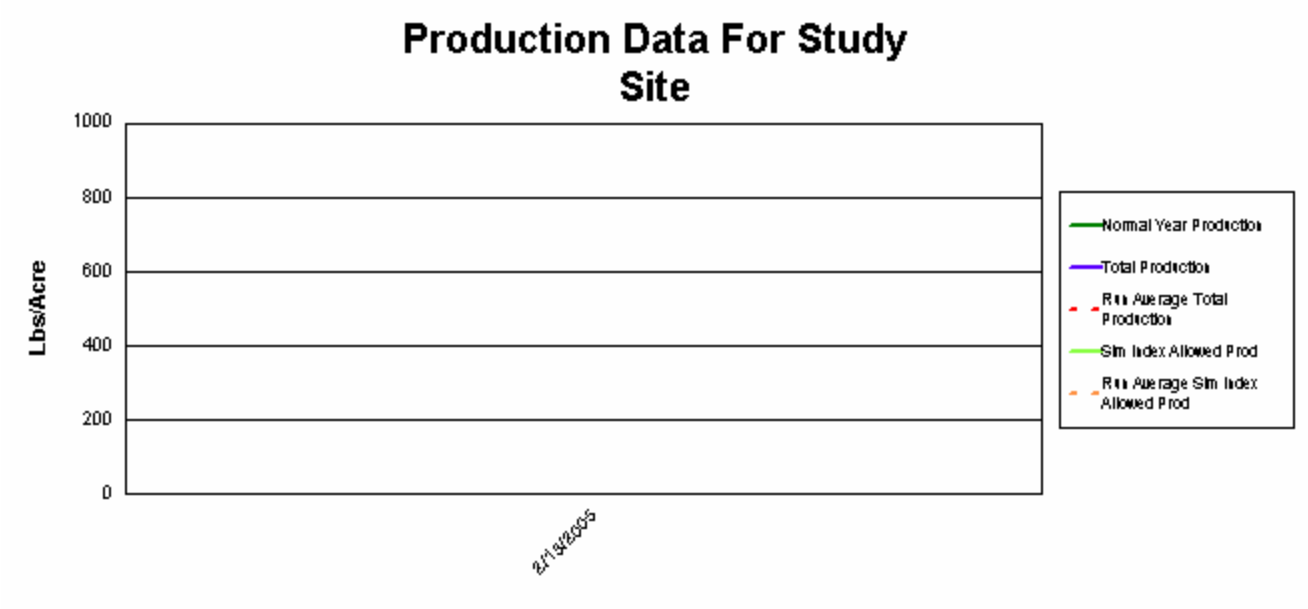
Allot No.	Allotment	Ecosite ID	Ecosite Name	Site Name
64075	GUY CECIL CONKLIN	042CY004NM	SANDY SD-3	64075-BIG#2

Location: **T.** 0150S **R.** 0230E **Sec.** 27 **QtrQt** NWSW **UTM-N** 3650356.490

CHAVES County, NM **UTM-E** 534495.892

Soil Sur No	Soil Map Unit	Soil Tax Name	Soil Association
NM666	So	SOTIM	SOTIM

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
02/13/2005	25.68	23.40	900	568.82	568.82	210.63	210.63



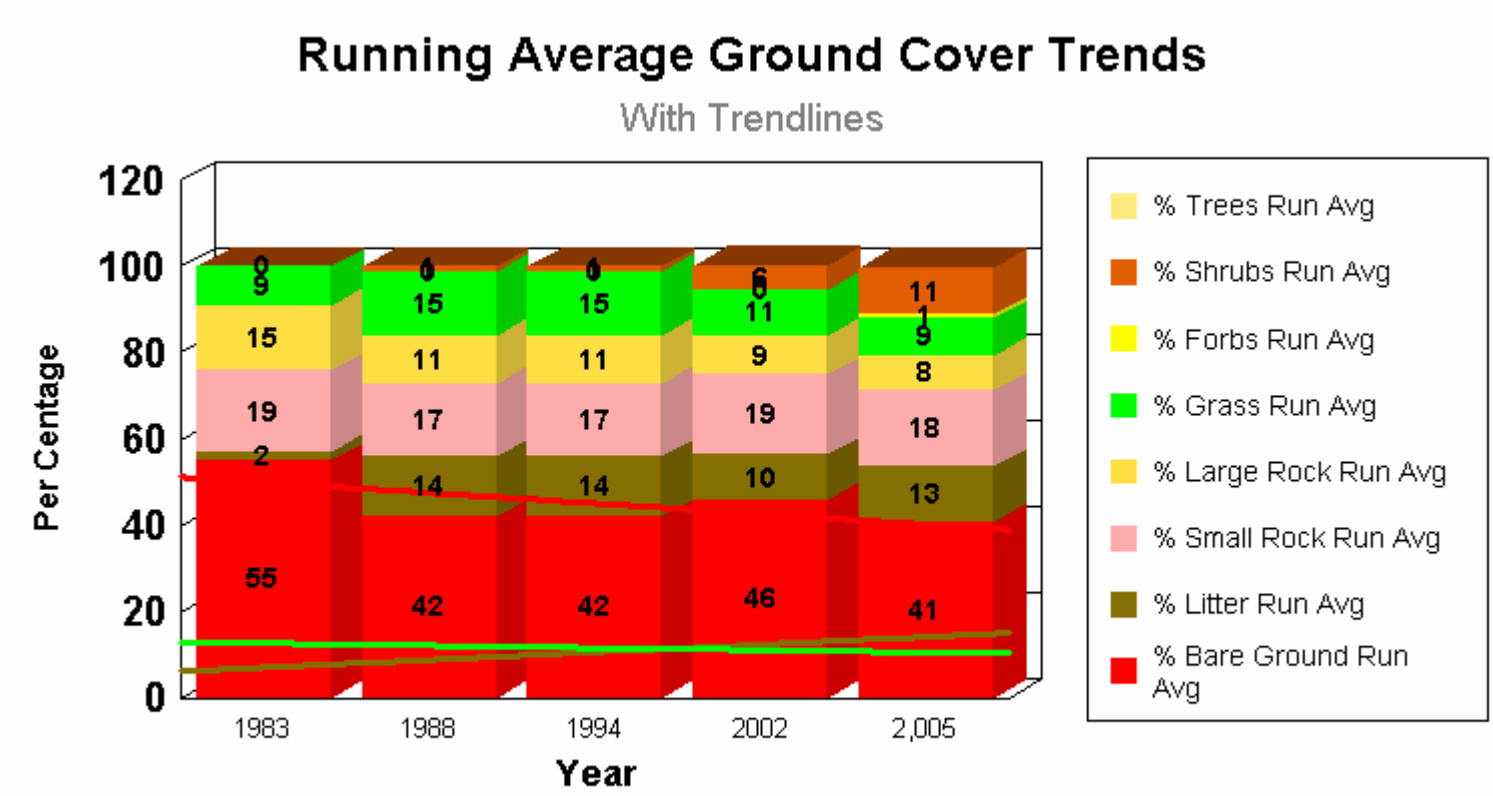
NM06000 Date Printed: 5/2/2005

64075 GUY CECIL CONKLIN BIG PASTURE Vegid#: 626

64075-BIG PASTURE-E105 Ecological Site No.: 042CY001NM

Location: Township: 0150S Range 0230E Section 27 QtrQtr: NWSW

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1983	55.00	2.00	19.00	15.00	0	9.00	0.00		55.00	2.00	19.00	15.00	0	9.00	0.00	
1988	29.00	26.00	15.00	7.00	0	21.00	2.00		42.00	14.00	17.00	11.00	0	15.00	1.00	
1994									42.00	14.00	17.00	11.00	0	15.00	1.00	
2002	54.00	3.00	22.00	5.00	0	2.00	15.00		46.00	10.33	18.67	9.00	0	10.67	5.67	
2005	25.00	20.00	15.00	6.00	4.00	2.00	26.00		40.75	12.75	17.75	8.25	1.00	8.50	10.75	



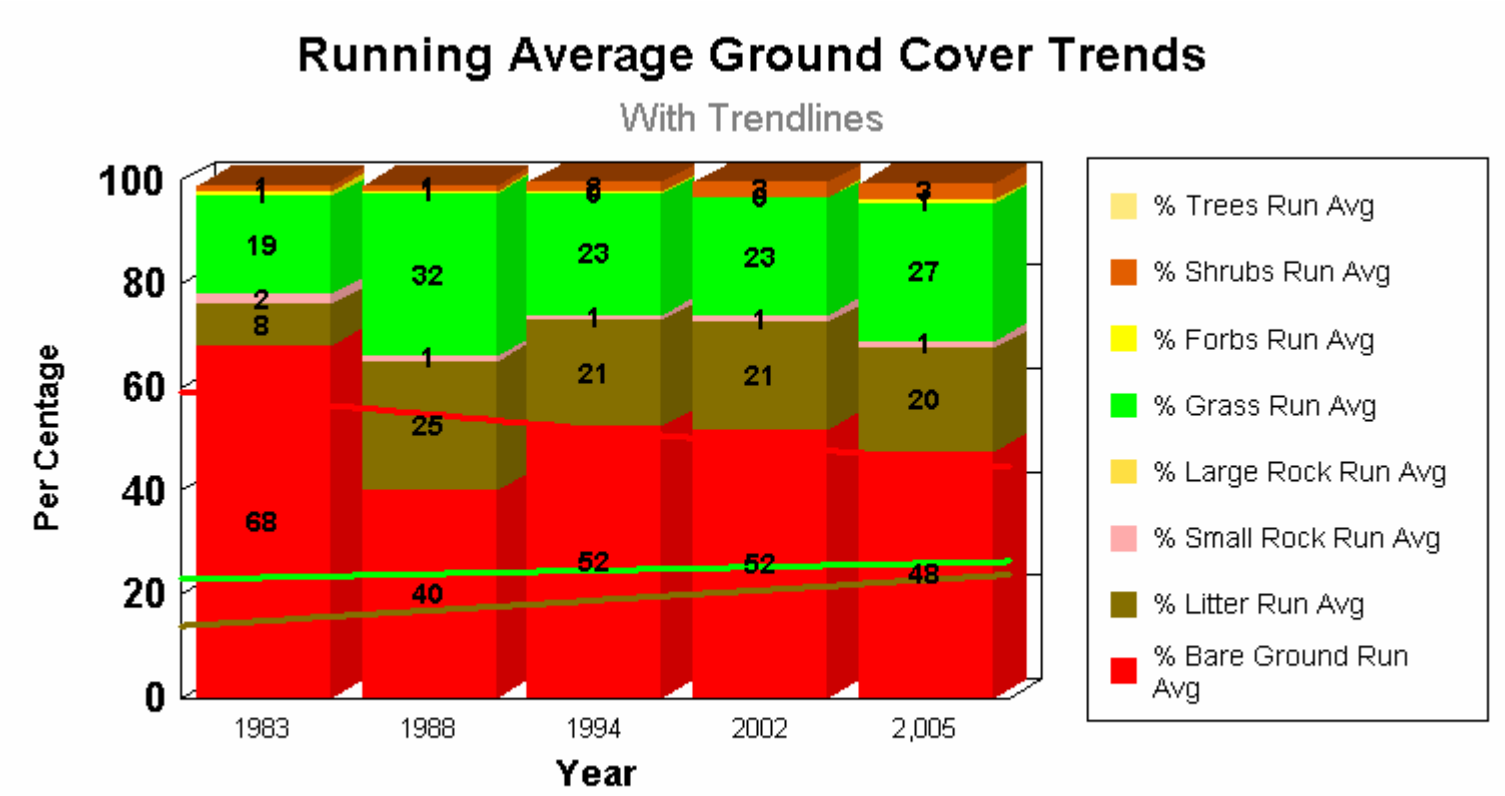
NM06000 Date Printed: 5/2/2005

64075 GUY CECIL CONKLIN FARM Vegid#: 627

64075-FARM-E106 Ecological Site No.: 042CY007NM

Location: Township: 0160S Range 0240E Section 03 QtrQtr: NWSE

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1983	68.00	8.00	2.00		1.00	19.00	1.00		68.00	8.00	2.00		1.00	19.00	1.00	
1988	12.00	42.00	0.00		0	44.00	1.00		40.00	25.00	1.00		0.50	31.50	1.00	
1994	77.00	12.00			0	7.00	4.00		52.33	20.67	1.00		0.33	23.33	2.00	
2002	50.00	21.00	2.00		0	21.00	5.00		51.75	20.75	1.33		0.25	22.75	2.75	
2005	31.00	17.00	1.00		2.00	43.00	5.00		47.60	20.00	1.25		0.60	26.80	3.20	



NM06000

Date Printed: 5/2/2005

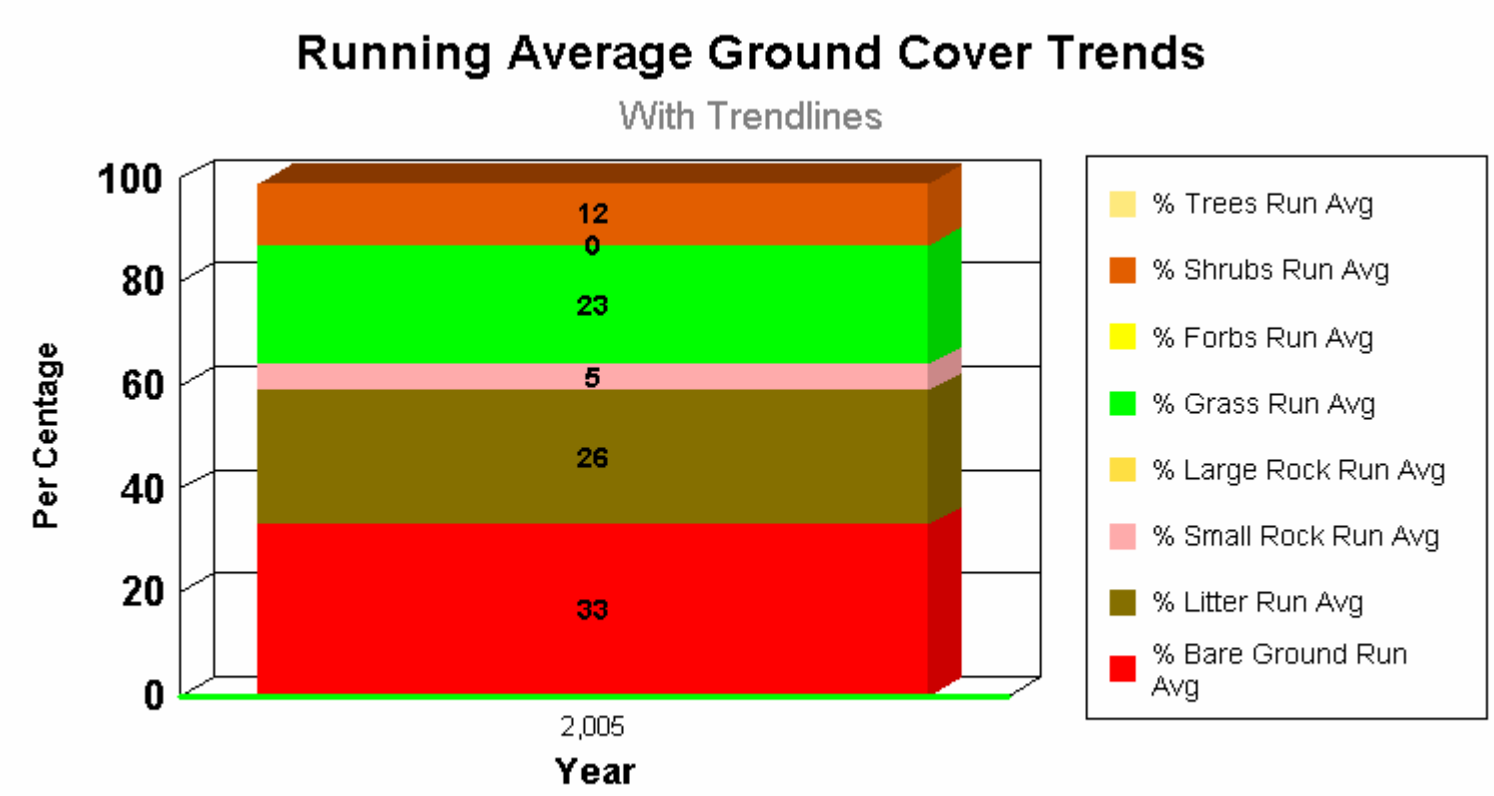
64075 GUY CECIL CONKLIN BIG PASTURE

Vegid#: 6203

64075-BIG#2 Ecological Site No.: 042CY004NM

Location: Township: 0150S Range 0230E Section 27 QtrQtr: NWSW

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
2005	33.00	26.00	5.00		0	23.00	12.00		33.00	26.00	5.00		0	23.00	12.00	



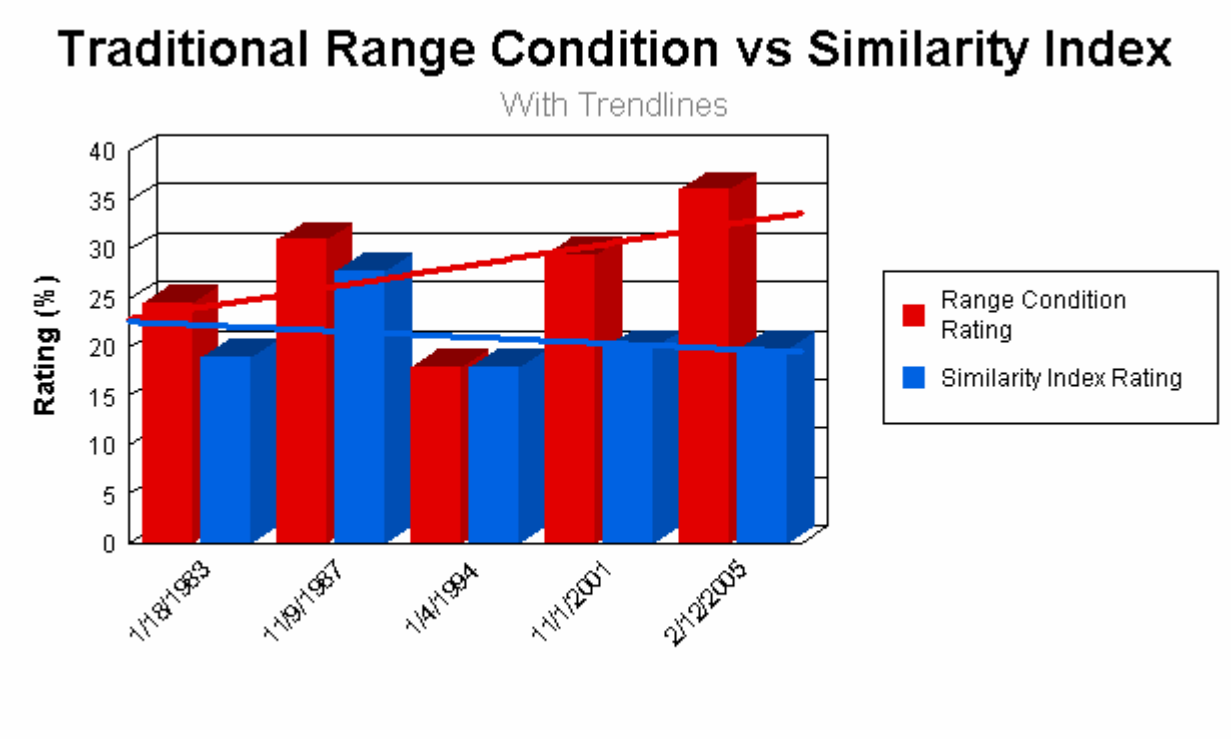
Traditional Range Condition and Similarity Index Data

VEGID: 626

64075 GUY CECIL CONKLIN 64075-BIG PASTURE-E105

GRAVELLY SD-3 042CY001NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
01/18/1983	24.54	19.00	290.00	600
11/09/1987	31.00	27.83	482.00	600
01/04/1994	18.00	18.00	227.00	600
11/01/2001	29.46	20.00	105.00	600
02/12/2005	36.09	19.81	201.32	600



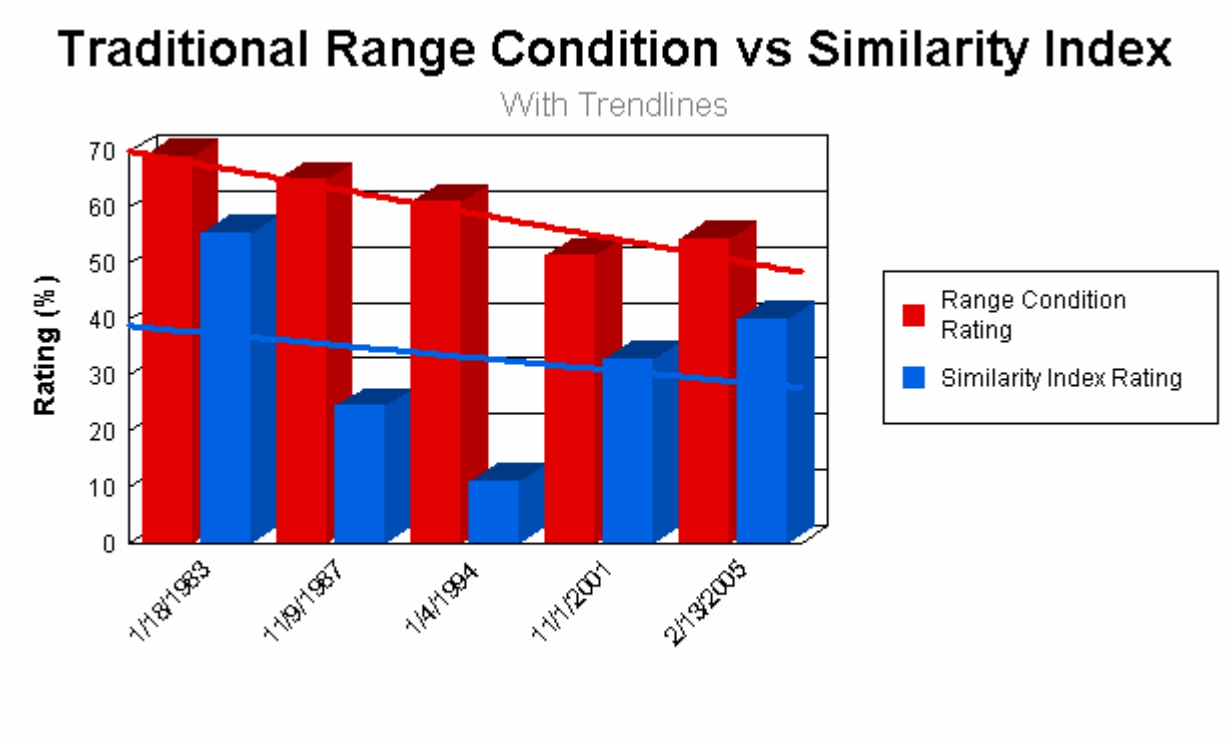
Traditional Range Condition and Similarity Index Data

VEGID: 627

64075 GUY CECIL CONKLIN 64075-FARM-E106

LOAMY SD-3 042CY007NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
01/18/1983	69.06	55.44	565.00	900
11/09/1987	65.00	24.44	226.00	900
01/04/1994	61.00	11.11	100.00	900
11/01/2001	51.32	33.00	331.00	900
02/13/2005	54.37	40.16	440.65	900



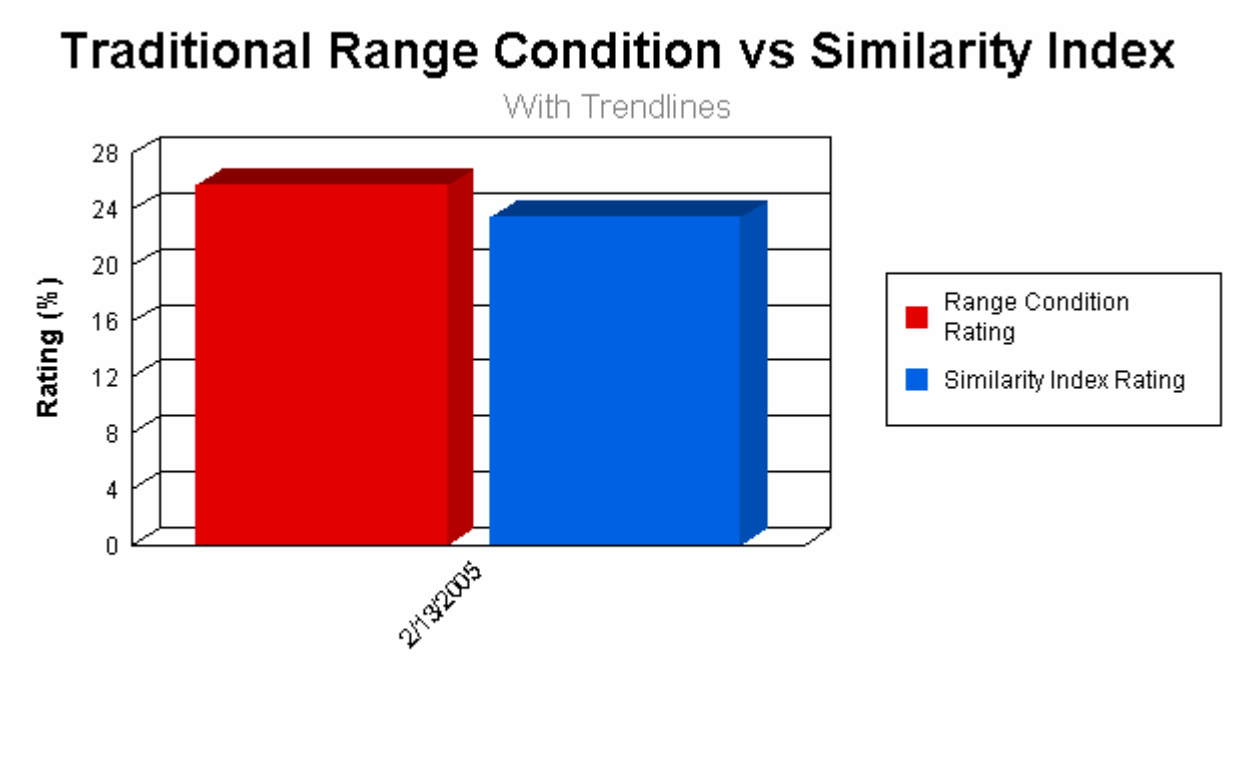
Traditional Range Condition and Similarity Index Data

VEGID: 6203

64075 GUY CECIL CONKLIN 64075-BIG#2

SANDY SD-3 042CY004NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
02/13/2005	25.68	23.40	568.82	900



Allotment Weighted Average Range Condition and Similarity Index

NM06000 Date Printed: 3/13/200

64075 GUY CECIL CONKLIN

Data Information presented below is based on the allotment weighted average of range condition and similarity index ratings for the years included in the allotment monitoring evaluations. The trendline is based on linear regression for each data set.

Year	Range Condition	Similarity Index
1983	45.99	36.56
1988	47.38	26.20
1994	38.72	14.68
2002	40.00	26.26
2005	40.97	30.97